

In the Claims:

Please amend the claims as follows:

1. (currently amended) A robot wrist with a plurality of rotatable parts arranged in series with each other, comprising:

at least a first wrist part (1) arranged in use to be mounted to a robot arm or automation machine to enable rotary movement of the first wrist part about a first axis, ~~yes,~~

a second wrist part (2) journaled in the first wrist part, wherein each wrist part is arranged with one or more gear members to drive a said rotary movement of any said wrist part relative to said another wrist part, ~~characterised in that and~~

a concave bevel gear arranged at a generatrix of the conical surface of least one of said gear members, ~~said is arranged as a concave bevel gear with having~~ a negative bevel angle ( $\epsilon_n$ ) relative to a plane (P) perpendicular to the rotation axis (A1, A2) of said gear member.

2. (currently amended) A ~~The~~ robot wrist according to claim 1, ~~characterised in that~~ wherein at least one of said gear members is arranged with a convex bevel gear with a positive bevel angle relative to a plane perpendicular to the rotation axis (A1, A2) and at least one other said gear member is arranged as a concave bevel gear with a negative bevel angle.

3. (currently amended) A ~~The~~ robot wrist according to claim 1, ~~characterised in that~~ wherein the negative bevel angle ( $\epsilon_n$ ) lies in the range between 0 and - 20 degrees.

4. (currently amended) A The robot wrist according to claim 1, ~~characterised in that~~  
wherein the negative bevel angle (Cn) lies in the range between -8 and -12 degrees.

5. (currently amended) A The robot wrist according to claim 1, ~~characterised in that~~  
wherein the gear member is an annular bevel gear.

6. (currently amended) A The robot wrist according to claim 1, ~~characterised in that~~  
wherein said second wrist part (2) is arranged with a said gear member (12, 13) with the negative  
bevel angle (Cn).

7. (currently amended) A The robot wrist according to claim 4, ~~characterised in that~~  
wherein the negative bevel angle (Cn) of the gear member of said second wrist part (2) is  
arranged to engage a gear member (10) of said first wrist part (1).

8. (currently amended) A The robot wrist according to claim 1, ~~characterised in that~~  
wherein each of said gear members has a hollow opening through which an inner protection hose  
(4) is arranged.

9. (currently amended) A The robot wrist according to claim 8, ~~characterised in that~~  
wherein the inner protection hose is arranged so as to pass through the inside of the wrist parts  
arranged in a single circular arc when the wrist is in a bent position.

10. (currently amended) A The robot wrist according to claim 8, ~~characterised in that~~

wherein the inner protection hose (4) passing through the inside of the wrist parts (1, 2, 3) has the same total length when arranged in each of a bent and a straight position.

11. (currently amended) A The robot wrist according to claim 8, characterised in that wherein the inner protection hose is a hose with a substantially cylindrical wall.

12. (currently amended) A The robot wrist according to claim 11, characterised in that wherein the inner protection hose is a hose with a cylindrical wall that has a straight and parallel wall cross-section.

13. (currently amended) A The robot wrist according to claim 12, characterised in that wherein the inner protection hose is a hose with a wall cross-section in the form of a wave.

14. (currently amended) A The robot wrist according to claim 12, characterised in that wherein the inner protection hose comprises an articulated hose comprising circular sections of at least two different diameters.

15. (currently amended) A The robot wrist according to claim 13, characterised in that wherein the inner protection hose is formed of a polymeric material combined with at least one metal reinforcing member.

16. (currently amended) A The robot wrist according to claim 15, characterised in that wherein the inner protection hose comprises a fluoropolymer.

17. (currently amended) A The robot wrist according to claim 15, characterised in that  
wherein the metal reinforcing member comprises a plurality of metal rings.

18. (currently amended) A The robot wrist according to claim 13, characterised in that  
wherein the metal reinforcing member comprises any of a spiral wire or a helical wire.

19. (currently amended) A The robot wrist according to claim 18, characterised in that  
wherein the metal rings, spiral wire or helical wire of the hose are attached to the outside surface  
of the polymeric material.

20. (currently amended) A The robot wrist according to claim 18, characterised in that  
wherein the rings, spiral wire or helical wire of the hose are embedded in the polymeric material.

21. (currently amended) A The robot wrist according to claim 1, characterised in that  
wherein a plurality of hoses and/or cables are arranged inside said inner protection hose (4)  
inside the wrist parts (1, 2, 3).

22. (currently amended) A The robot wrist according to claim 21, characterised in that  
wherein the plurality of hoses and/or cables are twisted to a predetermined extent inside the inner  
protection hose and comprise any from the list of: hose, wire, feed rod, cable.

23. (currently amended) A The robot wrist according to claim 22, characterised in that

wherein the plurality of hoses and/or cables are arranged installed inside the robot wrist twisted to a predetermined extent through 180 degrees.

24. (currently amended) A The robot wrist according to claim 1, ~~characterised in that~~  
wherein the negative bevel angle of gear member of said second wrist part (2) is arranged facing a third wrist part (3).

25. (currently amended) A The robot wrist according to ~~any of claims 1-24,~~  
~~characterised in that~~ claim 24, wherein the third wrist part (3) is journaled in the second wrist part (2) to enable rotary movement of the third wrist part relative the second wrist and the second wrist part relative the first.

26. (currently amended) A The robot wrist according to claim 1, ~~characterised in that~~  
wherein a gear member (10, 11) of the first part (1) is arranged to engage a gear member (12) of the second part such that the second wrist part transfers effect to rotatably drive a gear member (14) of the third wrist part (3) engaged by a second gear member (13) of the second part.

27. (currently amended) A The robot wrist according to claim 26, ~~characterised in that~~  
wherein the second part gear members (12, 13) transferring effect to the third part gear member are arranged in the second part such that their axes of rotation A1, A2 are at an inclined angle to each other.

28. (currently amended) A The robot wrist according to claim 26, ~~characterised in that~~

wherein a first part gear member (10) and a third part gear member (14) are convex bevel gears with a positive gear angle and a second part gear member (12, 13) is a concave bevel gear with a negative bevel angle.

29. (currently amended) Use of a robot wrist according to ~~any of claims 1-28~~ claim 1 for an internal or an external surface treatment operation or painting operation with an industrial robot.

30. (currently amended) Use of a robot wrist according to ~~any of claims 1-28~~ claim 1 for a welding operation with an industrial robot.

31. (currently amended) Use of a robot wrist according to ~~any of claims 1-28~~ claim 1 for a picking and/or packing operation with an industrial robot.

32. (currently amended) Use of a robot wrist according to ~~any of claims 1-28~~ claim 1 for a machine tending operation with an industrial robot.